REMARKS

Claims 1 to 9, 13 to 17 are presently pending in the subject patent application.

Claims 1, 2, 5, 7, 13 and 14 stand rejected under 35 USC 103(a) as being unpatentable over <u>Alexander</u> (US 6,272,120) in view of <u>Baker</u> (US 5,570,366). Claims 6, 8 and 9 stand rejected under 35 USC 103(a) as being unpatentable over <u>Alexander</u> in view of <u>Baker</u> and <u>Warren</u> (US 5,912,921). Claims 4 and 16 stand rejected under 35 USC 103(a) as being unpatentable over <u>Alexander</u> in view of <u>Baker</u> and <u>Cheung</u> (US 5,901,362).

With the current amendment, claims 3, 7 to 9, and 15 have been cancelled, without prejudice. Claims 1, 2, 4, 5, 6, 13, 14, 16 and 17 have been amended, as set out above.

The Applicant submits that the art cited by the Examiner is insufficient to sustain a *prima facie* obviousness rejection of the invention, as currently claimed. The Applicant's submission will be discussed in detail below, commencing with a review of claim 1 of the subject patent application.

INDEPENDENT CLAIM 1

New independent claim 1 of the subject patent application recites a communication device for facilitating communication between a wired network and mobile wireless devices. A first of the mobile wireless device is configured for communication using a first communication protocol, and a second of the mobile wireless devices is configured for communication using a second communication protocol that is different from the first communication protocol.

The communication device, as presently claimed, comprises:

(1) a wired network interface configured for interfacing with the wired network;

- (2) a first radio configured for communication with a first <u>mobile</u> wireless device using with the first communication protocol;
- (3) a second radio configured for communication with a second <u>mobile</u> wireless device using with the second communication protocol; and
- (4) a data controller in communication with the network interface and the first and second radios for controlling data traffic between the wired network and the wireless devices.

The data controller is configured (i) to receive from the wired network data intended for reception by one of the mobile wireless devices, (ii) to select one of the radios, the one radio being configured for communication with the one mobile wireless device; and (iii) to route all the received data to the radio associated with the one mobile wireless device.

In order to sustain a *prima facie* obviousness rejection of the invention recited in claim 1 in view of the modification of primary reference, there must be some motivation or suggestion in the cited art for the modification. Further, the motivation for the modification must not be based on subjective belief, but instead must be based on concrete evidence in the record. The appropriate inquiry is not whether the cited art <u>could</u> be modified to arrive at a claimed invention, but rather whether the cited art <u>would</u> have suggested the desirability of the invention. In addition, to sustain a *prima facie* obviousness rejection, a hypothetical person of ordinary skill must have a reasonable prospect of successfully achieving the claimed invention based on the combination of references.

As the Applicant will explain, the cited art would not provide any suggestion of a communication device configured in accordance with amended claim 1. Specifically, the teachings of <u>Baker</u>, <u>Meier</u> and <u>Cheung</u> would not suggest to a person of ordinary skill the desirability of modifying the dual-radio wireless bridge described by <u>Alexander</u> (implemented for the purpose of communicating with <u>stationary</u> bridges in a LAN) to communicate with <u>mobile</u> wireless devices <u>that</u>

were themselves configured with different communication protocols. The teachings of <u>Baker</u>, <u>Meier</u> and <u>Cheung</u> would also not suggest to a person of ordinary skill the desirability of modifying the dual-radio wireless bridge to employ a <u>single</u> data controller to route <u>all of the data</u> that was received from the wired network to one of the mobile wireless devices that was intended to receive the data.

Further, given the differences between <u>Alexander</u>, <u>Baker</u>, <u>Meier</u> and <u>Cheung</u> on the one hand, and the invention recited in amended claim 1 on the other hand, the cited art would not provide the hypothetical person of ordinary skill with a reasonable prospect of successfully modifying the dual-radio wireless bridge as taught by <u>Alexander</u> to communicate with <u>mobile</u> wireless devices <u>that were themselves</u> <u>configured with different communication protocols</u>.

Accordingly, it is the Applicant's position that the invention recited in independent claim 1 of the subject patent application cannot be considered obvious in view of the cited references.

The Applicant's position will be discussed in detail below, with reference to the foregoing paragraphs of independent claim 1.

1.0 A communication device for facilitating communication between a wired network and wireless devices, the wireless devices including a first mobile wireless device and a second mobile wireless device, the first wireless device being configured for communication using a first communication protocol, the second wireless device being configured for communication using a second communication protocol different from the first communication protocol, the communication device comprising:

a first radio configured for communication with the first mobile wireless device using the first communication protocol;

a second radio configured for communication with the second mobile wireless device using the second communication protocol

1.1 No suggestion to modify Alexander to communicate with mobile terminals

Alexander (US 6,272,120) describes a multi-radio bridge for coupling together multiple stationary LANs. Alexander discloses that the bridge 100 includes two or more equivalent radios 250 that communicate with other stationary wireless client-bridges 166 (col. 9, lines 16 to 22). However, Alexander does not teach or suggest that the radios 250 of the bridge 100 could be used to communicate with mobile terminals.

Alexander discloses that the bridge 100 includes a routing table 400 for routing packet data 200 to the appropriate radio 250. The routing table 400 includes information that identifies which radio 250 should be used to send the packet data 200 to reach the appropriate wireless client-bridge 166 (col. 11, lines 6 to 9). Although Alexander discloses that the routing table 400 may include information that identifies the mobile terminals 172 associated with each wireless client-bridge 166 (col. 11, lines 22 to 25), the radios 250 of the bridge 100 do not themselves communicate with the mobile terminals 172. Rather, the radios 250 of the bridge 100 only communicate with the wireless client-bridges 166, which in turn communicate with their associated mobile terminals 172. Thus, Alexander does not describe a bridge 100 that bridges communication between a wired network and mobile wireless terminals 172.

Further, as discussed above, <u>Alexander</u> clearly contemplated the idea of having mobile wireless terminals 172 within the communication network. However, <u>Alexander</u>, <u>who is an individual possessed of inventive skill</u>, did not contemplate having the bridge 100 communicate with the mobile wireless terminals 172. Rather, <u>Alexander only contemplated having the bridge 100 communicate with stationary wireless client-bridges 166</u>. And, at column 6, lines 3 to 6 of the patent, <u>Alexander points out that the bridges 166 communicate in a dedicated manner with the other bridges 166</u>.

Thus, <u>Alexander</u> would not suggest to the person of <u>ordinary skill</u> that the bridge 100 could be modified to communicate directly with mobile wireless terminals 172. Instead, since <u>Alexander</u> is an individual possessed of <u>inventive skill</u>, <u>Alexander</u> would only suggest to the person of <u>ordinary skill</u> that the bridge 100 could be used to communicate with stationary wireless client-bridges 166.

<u>Baker</u> (US5,570,366) describes a broadcast filtering mechanism, implemented at an access point, for limiting the amount of broadcast traffic on a wired network that propagates through to a wireless network. As discussed at column 4, line 52 to column 5, line 18, <u>Baker</u> discloses that if filtering is enabled, when the access point receives a broadcast message for a wireless terminal it first determines whether filtering is to be based on the MAC address. If so, the access point compares the MAC address of the broadcast frame against information stored in an access point table. If no match is found, the frame is discarded. Similar comparisons are made for protocol type and protocol address. In each case, if no match is found, the frame is discarded. The frame is transmitted to the wireless terminal only if the filter parameter matches an entry in the access point table.

Although the filtering mechanism described by <u>Baker</u> facilitates communication between an access point and wireless terminals, it must be remembered that an obviousness rejection must be based, not on selective passages of the prior art references, but the teachings of the references as a whole. In this regard, we point out that <u>Baker</u> is directed to limiting the amount of broadcast or multicast packets on the wireless network (see column 3, lines 19 to 23). This object is achieved by <u>discarding</u> broadcast frames that do not meet predefined criteria. In contrast, <u>Alexander</u> is directed to <u>maintaining</u> communication between a bridge and multiple stationary LANs. <u>Baker</u> would not suggest to the person of ordinary skill the desirability of modifying the dual-radio bridge 100 of <u>Alexander</u> to communicate with mobile terminals since the application of the teaching of <u>Baker</u> to the dual-radio bridge 100 would result in a bridge that <u>inhibited</u> communication, thereby defeating the primary objective of <u>Alexander</u>.

Cheung (US 5,901,362) describes a mechanism for providing internetworking services to wireless nodes. At column 3, lines 16 to 51, and column 4, lines 43 to 53, Cheung discloses that the internetworking services are provided via an internetworking device (eg. access point) that establishes an internetworking node which either directly relays a message from one wireless node to another wireless node via the wireless network, or indirectly relays the message by forwarding same to another internetworking node via the wired network.

The internetworking device has a wireless network adapter to facilitate communication over the wireless network, and a wired network adapter to facilitate communication over the wired network. Further, at column 2, lines 59 to 60, Cheung discloses that the wireless nodes with which the internetworking device communicate are usually mobile nodes (eg. mobile terminals). However, Cheung does not disclose that the internetworking device has multiple wireless adapters for communicating with the mobile wireless nodes. Since Cheung is not directed to a dual-radio internetworking device, Cheung would not suggest to the person of ordinary skill the desirability of modifying the dual-radio bridge 100 of Alexander.

Meier (US 6,046,992) describes a wireless local area network having a gateway 20 (also referred to as a root node) that communicates with the other bridges 40, 44 through two independent RF links. However, Meier does not disclose that the gateway 20 could communicate with mobile terminals. Instead, at column 2, lines 3 to 8, Meier discloses that in order to maintain efficient handling of data, communication between the host computer and any RF terminals is achieved using a network of intermediate base stations. Thus, Meier teaches away from the idea of modifying the dual-radio bridge 100 of Alexander to communicate with mobile terminals.

1.2 No suggestion to communicate with mobile terminals configured with different communication protocols

Alexander does not teach or suggest that the wireless client-bridge 166 could be used to communicate (even indirectly) with mobile wireless terminals 172 that were configured for communication using different communications protocols. Although Alexander discloses that the communication system 120 may have any number of access points 176 on any number of bridges 166 (col. 6, lines 6 to 9), and that some of the radios on the bridges 166 could operate using FH while other radios operate using DS (col. 5, lines 50 to 60), Alexander does not mention that the system 120 could include mobile terminals 172 configured with different communications protocols. Instead, Alexander only describes a mechanism for interfacing incompatible wireless client-bridges 166 with a common bridge 100 (via the assignment of fixed distinct carrier frequencies or PN codes).

At column 11, lines 10 to 23, <u>Alexander</u> describes a scenario in which a mobile wireless terminal 172 roams from one wireless client-bridge 166 to another wireless client-bridge 166. <u>Alexander</u> does not mention that the wireless terminals 172 could be configured with different communication protocols. It will be appreciated that if a mobile wireless terminal 172 associated with a first client-bridge 166 moved within range of a second client-bridge 166, the second client-bridge 166 would not be able to communicate with the mobile wireless terminal 172 unless both client-bridges 166 were configured with the <u>same</u> communications protocol.

In the context of <u>Alexander</u>'s detailed instructions for interfacing incompatible wireless client-bridges 166 with a common bridge 100, <u>Alexander</u>'s failure to provide any similar instruction for interfacing different mobile wireless terminals 172 with a common wireless client-bridge 166 would suggest to the person of ordinary skill that the bridge 100 could NOT be used to communicate with mobile wireless terminals 172 that were configured with different communications protocols. Accordingly, <u>Alexander</u> would not suggest to a person of ordinary skill the desirability of modifying a dual-radio wireless bridge (implemented for the purpose of communicating with <u>stationary</u> bridges in a LAN) to communicate with

mobile wireless devices that were themselves configured with different communication protocols.

Meier describes a wireless local area network having a root node 20 that communicates with the other bridges 40, 44 through two independent RF links. At column 4, lines 55 to 57, Meier discloses that both of the RF links use a spread-spectrum polling protocol. Meier does not teach or suggest that the radio used to implement one of the RF links would use a spread-spectrum protocol, and the radio used to implement the other RF link would use another protocol. Consequently, Meier would not suggest to the person of ordinary skill the desirability of modifying the dual-radio bridge 100 of Alexander to communicate with mobile terminals that were themselves configured with different communication protocols.

As discussed above, <u>Cheung</u> discloses that the internetworking device has a wireless network adapter to facilitate communication over the wireless network, and a wired network adapter to facilitate communication over the wired network. However, <u>Cheung</u> does not disclose that the internetworking device included multiple radios, or was capable of communicating with mobile terminals that were configured with different communication protocols. Rather, at column 10, line 55 to column 11, line 5, <u>Cheung</u> discloses that a mobile node moves from an old access point to a new access point simply be initiating a reconnection request with the new access point. This reconnection methodology requires all mobile nodes to be configured with the same communication protocol. Thus, <u>Cheung</u> would not suggest to the person of ordinary skill the desirability of modifying the dual-radio bridge 100 of <u>Alexander</u> to communicate with <u>mobile terminals that were</u> themselves configured with different communication protocols.

<u>Baker</u> describes an access point broadcast filtering mechanism that filters frames based on criteria such as protocol type. However, as discussed above, the filtering mechanism is only concerned with limiting the amount of broadcast or multicast packets on the wireless network. This object is achieved by <u>discarding</u> broadcast

frames that do not meet predefined criteria. <u>Baker</u> would not suggest to the person of ordinary skill the desirability of modifying the dual-radio bridge 100 of <u>Alexander</u> to communicate with <u>mobile terminals that were themselves configured</u> with <u>different communication protocols</u> since the application of the teaching of <u>Baker</u> to the dual-radio bridge 100 would result in a bridge that <u>inhibited</u> communication, thereby defeating the primary objective of <u>Alexander</u>.

1.3 No motivation to communicate with mobile terminals configured with different communication protocols

At column 10, line 57 to column 11, line 23, <u>Alexander</u> describes a scenario in which a mobile wireless terminal 172 roams from one wireless client-bridge 166 to another wireless client-bridge 166. According to this scenario, if the multi-radio bridge 100 transmits a packet to the client-bridge 166 that was previously associated with the mobile terminal 172, that client-bridge 166 will reply to the multi-radio bridge 100 with a negative acknowledgement. In response, the multi-radio bridge 100 issues a broadcast message via all of its radios 250.

Presumably, each client-bridge 166 would relay the broadcast message via all of its access points 176. The mobile terminal 172 for which the broadcast message was intended would respond to its client-bridge 166 with an acknowledgement. The client-bridge 166 would then forward the acknowledgement to the multi-radio bridge 100 which, in turn, would update the routing table 400 with the new location of the mobile terminal 172.

As will be apparent from this description, unless the mobile terminal 172 is configured with the same communication protocol as the original client-bridge 166 and the new client-bridge 166, the mobile terminal 172 would not receive the broadcast message. Similarly, none of the client-bridges 166 would receive the acknowledgement from the mobile terminal 172.

Neither <u>Baker</u> nor <u>Meier</u> enhances this aspect of the teaching of <u>Alexander</u>. <u>Baker</u> does not describe an access point having multiple radios, and does not describe any mechanism for routing frames between the radios. Clearly, <u>Baker</u> does not describe a mechanism for routing frames between access point radios configured with different communication protocols. <u>Meier</u> discloses that the gateway 20 includes two RF links. However, <u>Meier</u> does not teach or suggest that the radio used to implement one of the RF links would use one protocol, and the radio used to implement the other RF link would use another protocol. Accordingly, a person of ordinary skill would not be motivated to modify the multi-radio bridge 100 taught by Alexander to communicate with mobile terminals 172 that were configured with different communication protocols since the multi-radio bridge 100 would become useless for the purpose intended.

1.4 No reasonable prospect of success to communicate with mobile terminals configured with different communication protocols

At column 10, line 41 to column 11, line 2, <u>Alexander</u> describes a mechanism for routing a packet 200 between a device 140 coupled to the wired network, and a device 162 coupled to one of the client-bridges 166. <u>Alexander</u> explains that when the multi-radio bridge 100 receives the packet 200 from the source device 140, the packet 200 includes the source address of the source device 140 and the destination address of the destination device 162. The multi-radio bridge 100 reads the source and destination addresses from the packet 200, and then wraps the packet 200 in a shell packet 200'. The header of the shell packet 200' includes the source and destination addresses that were included with the packet 200.

Based on the routing information contained in the routing table 400, the multi-radio bridge 100 routes the shell packet 200' to the appropriate radio 250, where it is transmitted to the corresponding client-bridge 166. Upon receipt of the shell packet 200', the client-bridge 166 strips the shell packet 200' from the packet 200, and then transmits the packet 200 to the destination device 162.

As will be apparent from this description, the multi-radio bridge 100 does not perform any protocol conversion on the packet 200. Rather, the multi-radio bridge 100 merely wraps the packet 200 in a shell packet 200'. The recipient client-bridge 166 need only remove the shell packet 200' from the packet 200 to enable the client-bridge 166 to transmit the packet 200 to the mobile terminal 172.

With such limited processing, the <u>multi-radio bridge 100 would only be able to communicate with client-bridges 166 and mobile terminals 172 that were configured with the same communication protocol. Alexander does not provide any other mechanism for communicating with client-bridges 166. Similarly, <u>Baker</u>, <u>Meier and Cheung</u> do not provide any teaching for communicating with mobile terminals that are configured with different communication protocols. Accordingly, a person of ordinary skill would not have a reasonable prospect of successfully modifying Alexander to allow the multi-radio bridge 100 to communicate with mobile terminals 172 that were configured with different communication protocols.</u>

2.0 a data controller that is configured to:

- (i) receive from a wired network data intended for reception by one of the mobile wireless devices;
- (ii) select one of the radios, the one radio being configured for communication with the one mobile wireless device; and
- (iii) route all the received data to the selected radio for transmission to the one mobile wireless device
- 2.1 No motivation to utilize a single data controller that is configured to select one of the radios (configured for communication with one of the mobile wireless devices) and to route the received data to the selected radio

 Alexander discloses that the dual-radio bridge 100 includes two or more equivalent radios 250 that communicate with other wireless bridges 166 using different RF carrier frequencies or different PN codes (col. 9, lines 16 to 27). The radios 250 do not communicate with mobile wireless terminals. Meier describes a root node 20

that has a pair of RF links. As in <u>Alexander</u>, each RF link in <u>Meier</u> communicates with a respective bridge 40, 44. The RF links do not communicate with <u>mobile</u> <u>terminals</u>. Accordingly, <u>Meier</u> would not suggest the idea of modifying the dual-radio bridge 100 described by <u>Alexander</u> to include a data controller for selecting the appropriate radio 250 for transmission of data to the intended <u>mobile wireless</u> terminal.

Further, Alexander points out that the radios 250 each have their own respective radio processor 296 (col. 9, lines 28 to 31). Alexander discloses that this arrangement allows optimal processing since neither radio processor 296 processes information for the other radio 250 (col. 9, lines 32 to 34). Accordingly, although Meier describes a gateway 20 having a pair of RF links, a person of ordinary skill would not be motivated by Meier to modify the dual-radio bridge 100 taught by Alexander to include a single data controller for selecting the appropriate radio 250 for transmission of data to the intended mobile wireless terminal since doing so would defeat the optimal processing advantage taught by Alexander. Instead, by pointing out that optimal processing is obtained using multiple radio processors 296, Alexander teaches away from the idea of using a single data controller for selecting the appropriate radio 250 for transmission of data to the intended mobile wireless terminal.

2.2 No motivation to route all the received data to the radio associated with the intended mobile wireless terminal

As discussed above, <u>Baker</u> teaches the advantage of <u>suppressing the transmission of frames</u> over the wireless network. Thus, the person of ordinary skill would not be motivated by <u>Baker</u> to modify the dual-radio bridge 100 of <u>Alexander</u> to include a single data controller for directing all the data intended for a particular mobile terminal to the radio 250 associated with that mobile terminal. Instead, by describing the advantage of <u>suppressing the transmission of frames</u>, the person of ordinary skill would be motivated by <u>Baker</u> to modify the dual-radio bridge 100 of <u>Alexander</u> to suppress data transmission.

3.0 Summary of Submissions re Independent Claim 1

(i) There is no suggestion in the cited art to modify the multi-radio bridge 100 taught by Alexander to communicate with mobile terminals

Although <u>Cheung</u> describes an internetworking device for interconnecting wireless nodes via a wired network, <u>Cheung</u> does not describe a dual-radio internetworking device. Thus, <u>Cheung</u> would not suggest to the person of ordinary skill the desirability of making any modifications to the dual-radio bridge 100 described by Alexander.

<u>Baker</u> describes a filtering mechanism for limiting the amount of broadcast or multicast packet traffic over the wireless network. <u>Baker</u> would not suggest the desirability of modifying the dual-radio bridge 100 described by <u>Alexander</u> to communicate with mobile wireless terminals since the application of <u>Baker</u> to <u>Alexander</u> would result in a bridge that inhibited communication, contrary to the primary objective of <u>Alexander</u>.

Meier describes a wireless local area network having a gateway 20 that communicates with the other bridges 40, 44 through two independent RF links.

Meier discloses that in order to maintain efficient handling of data, communication between the host computer and any RF terminals is achieved using a network of intermediate base stations. Thus, Meier teaches away from the idea of modifying the dual-radio bridge 100 of Alexander to communicate with mobile terminals.

(ii) There is no suggestion in the cited art to modify the multi-radio bridge 100 taught by <u>Alexander</u> to communicate with mobile terminals that are configured with different communication protocols

<u>Meier</u> describes a wireless local area network having a gateway 20 that communicates with the other bridges 40, 44 through two independent RF links.

Meier does not disclose that the RF links could use different communication protocols. Thus, Meier would not suggest to the person of ordinary skill the desirability of modifying the dual-radio bridge 100 of Alexander to communicate with mobile terminals that were themselves configured with different communication protocols.

Cheung discloses that a mobile node moves from an old access point to a new access point simply be initiating a reconnection request with the new access point. This reconnection methodology requires all mobile nodes to be configured with the same communication protocol. Thus, Cheung would not suggest to the person of ordinary skill the desirability of modifying the dual-radio bridge 100 of Alexander to communicate with mobile terminals that were themselves configured with different communication protocols.

<u>Baker</u> would also not suggest to the person of ordinary skill the desirability of modifying the dual-radio bridge 100 to communicate with mobile terminals that were themselves configured with different communication protocols since the application of the teaching of <u>Baker</u> to the dual-radio bridge 100 would result in a bridge that <u>inhibited</u> communication, thereby defeating the primary object of <u>Alexander</u>.

(iii) There is no motivation in the cited art to modify the multi-radio bridge 100 taught by <u>Alexander</u> to communicate with mobile terminals that are configured with different communication protocols

If the mobile terminals 172 of <u>Alexander</u> were configured with different communication protocols, the mobile terminals 172 would not be able to register with the dual-radio bridge 100 since the client-bridge 166 would not receive the acknowledgement from the mobile terminals 172 in response to a broadcast message from the dual-radio bridge 100. Neither <u>Baker</u> nor <u>Meier</u> enhance this aspect of the teaching of <u>Alexander</u>.

Baker does not describe a mechanism for routing frames between access point radios configured with different communication protocols. Meier discloses that the gateway 20 includes two RF links. However, Meier does not teach or suggest that the radio used to implement one of the RF links would use one protocol, and the radio used to implement the other RF link would use another protocol. Accordingly, a person of ordinary skill would not be motivated to modify the multiradio bridge 100 taught by Alexander to communicate with mobile terminals 172 that were configured with different communication protocols since the multi-radio bridge 100 would become useless for the purpose intended.

(iv) There is no reasonable prospect that a person of ordinary skill could successfully modify the multi-radio bridge 100 taught by <u>Alexander</u> to communicate with mobile terminals that are configured with different communication protocols

With the limited packet processing described by <u>Alexander</u>, the multi-radio bridge 100 would only be able to communicate with client-bridges 166 and mobile terminals 172 that were configured with the same communication protocol. <u>Baker</u>, <u>Cheung</u> and <u>Meier</u> do not provide any teaching for communicating with mobile terminals that are configured with different communication protocols. Accordingly, a person of ordinary skill would not have a reasonable prospect of successfully modifying <u>Alexander</u> to allow the multi-radio bridge 100 to communicate with mobile terminals 172 that were configured with different communication protocols.

(v) There is no motivation in the cited art to modify the multi-radio bridge 100 taught by <u>Alexander</u> to utilize a single data controller to route the received data to the appropriate radio

The radios 250 of the multi-radio bridge 100 each have their own respective radio processor 296. <u>Alexander</u> discloses this arrangement provides optimal processing since neither radio processor 296 processes information for the other radio 250.

Accordingly, <u>Alexander</u> teaches away from the idea of using a single data controller for selecting the appropriate radio 250 for transmission of data to the intended mobile wireless terminal.

(vi) There is no motivation in the cited art to modify the multi-radio bridge 100 taught by <u>Alexander</u> to route all of the received data to the radio associated with the intended mobile wireless terminal

<u>Baker</u> teaches the advantage of suppressing the transmission of frames over the wireless network. Thus, the person of ordinary skill would not be motivated to modify the dual-radio bridge 100 taught by Alexander to include a single data controller for directing all the data intended for a mobile wireless terminal to the radio associated with that terminal. Instead, the person of ordinary skill would be motivated by this advantage to modify the dual-radio bridge 100 taught by <u>Alexander</u> to suppress the transmission of frames.

Since the cited art does not suggest the claimed invention, and would not direct the person of ordinary skill towards the claimed invention, and since the person of ordinary skill would not have a reasonable prospect of successfully modifying the multi-radio bridge taught by <u>Alexander</u> to achieve the claimed invention, the Applicant submits that the art cited by the Examiner is insufficient to sustain a *prima facie* obviousness rejection of the invention recited in claim 1. Further, since claims 2, 4, 5 and 6 depend from claim 1, the foregoing submissions apply equally to claims 2, 4, 5 and 6.

INDEPENDENT CLAIM 13

Independent Claim 13 is the method equivalent to Independent Claim 1.

Accordingly, the submissions made in connection with Claim 1 apply equally to the obviousness rejection of Claim 13. Further, since claims 14, 16 and 17 depend from claim 13, the foregoing submissions apply equally to claims 14, 16 and 17.

Also, with respect to each claim rejection, the Applicant submits that the basis for each obviousness rejections was improper. For instance, the Applicant notes that, at paragraph 2 of the Office Action, the Examiner argued that, with respect to claims 1, 2, 5, 7, 13 and 14, it would have been obvious to modify the teachings of Alexander to include the teachings of Baker in order to manage, control and filter data traffic between wired and wireless device to overall optimize network efficiency. However, the Examiner failed to identify any particular passage of Baker as evidence for this motive.

As the Court of Appeals for the Federal Circuit explained in *Re Sang-Su Lee* 00-1158, Serial No. 07/631,240, January 18, 2002, there must be some concrete evidence in the record for the motivation or suggestion for a claim rejection under 35 USC 103(a). Mere conclusory statements on the part of the Examiner concerning motivation or suggestion were deemed to be improper. Given that Baker was not concerned with optimizing "network efficiency" but was only concerned with limiting the amount of broadcast or multicast packets on the wireless network, the Applicant submits that the basis for the Examiner's obviousness rejection of claim 1 was improper.

Similarly, in paragraph 3, with respect to claim 15, the Examiner argued that since Cheung utilized protocol conversion, it would have been obvious to include protocol conversion as taught by Cheung in Alexander in view of Baker's invention to clearly distinguish wired data from wireless data. As the Court of Appeals for the Federal Circuit reiterated in *re Rouffet* 47 USPQ2d 1453, 1457 (Fed. Cir. 1998), this approach to an obviousness rejection is improper:

As this court has stated, "virtually all [inventions] are combinations of old elements." *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 USPQ 865, 870 (Fed. Cir. 1983); see also Richdel, Inc. v. Sunspool Corp., 714 F.2d 1573, 1579-80, 219 USPQ 8, 12 (Fed. Cir. 1983) ("Most, if not all, inventions are combinations and mostly of old elements.") Therefore an examiner may often find every element of a claimed

invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blue-print for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996).

Rather, as the Court of Appeals for the Federal Circuit explained in *re Gordon*, 221 USPQ 1125, 1127 (CAFC. 1984, the appropriate inquiry under 35 USC 103(a) was not whether the cited art <u>could</u> be modified to arrive at a claimed invention, but rather whether the prior art <u>would</u> have suggested the desirability of the invention. Since the Examiner failed to provide any evidence that the person of ordinary skill <u>would</u> make any of the identified modifications, the Applicant submits that the Examiner's obviousness rejection of the claimed invention was improper.

In view of this deficiency in the basis for the Examiner's obviousness rejections, and the fact that the cited art cannot be used to sustain a *prima facie* obviousness rejection of the claimed invention, the Applicant respectfully requests that the Examiner withdraw the obviousness rejections against all claims on file.

Respectfully submitted,
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